



Watersheds

A watershed is the land that water flows across or under on its way to a stream, river or lake and is nature's way of dividing up the landscape. New England includes many eco-systems that, by virtue of their ecological value, recreational value, or proximity to large populations, hold a special significance to us. EPA New England is focusing particular attention and resources on these special places. Working closely with our federal, state and local partners, these community based initiatives are delivering tangible environmental improvements to these watershed areas.

► EPA Contact

Bill Walsh-Rogalski
(617) 918-1035
walshrogalski.william@epa.gov

► Charles River Watershed Association Contact

Kristen Finn
(617) 965-5975



Customer Call Center
888-372-7341
www.epa.gov/region1

Charles River



What Makes the Charles River Watershed Special?

- One of the busiest recreational rivers in the world, the lower Charles is lined with boat houses, sports fields, and performance facilities and attracts 20,000 users daily and up to a half-million people for special events.

Why is the River Polluted?

- Stormwater runoff, sewer overflows and illegal sewer tie-ins carry bacterial pollution to the river.
- In 1995, swimming standards were met only 19% of the time, and boating standards met only 39%.

What is "Clean Charles 2005"?

The "Clean Charles 2005" initiative aims to make the Charles River swimmable and fishable by Earth Day 2005.

- In May 2002, EPA issued its annual report card for 2002 on the river's health, giving it a B, the same grade as the last years but improved from a D in 1995. The score is based on monthly monitoring results from the Charles River Watershed Association.

Report Card 2001	
1995	D
1996	C-
1997	C
1998	B-
1999	B
2000	B
2001	B
2005 Goal	A

Progress/Goals for the Future

What Partnership Progress has Been Made?

- All stormwater discharges to the river were inspected for illegal connections and removal of them is almost complete, resulting in roughly 1 million gallons of contaminated flow eliminated per day. Also, over 18 miles of leaking sewerlines were replaced in Waltham and Newton.
- The Watershed Institute continues a program with 9 high schools in the lower Charles to monitor water quality, and bird and insect diversity near the river.
- Enforcement settlements include projects to restore the Charles River. One major development project at MIT includes stormwater management.
- Major progress made on combined sewer overflow (CSO) controls including work to separate stormwater and sewer lines in Stony Brook area, closure of outfalls, and dechlorination of the Cottage Farm CSO facility.
- USGS studies in 2001 show water clarity is caused by suspended solids, salt water intrusion causes significant oxygen depletion, and bottom sediments in river basin are heavily contaminated.
- MIT and EPA hosted a competition for innovative stormwater designs.
- USGS's 2002 study on contamination loads to the lower Charles indicates stormwater remains a major source.
- Workshops were held for lower Charles communities on stormwater outreach and education.

Charles River Watershed



Watersheds



What Major Actions are Planned for 2002?

- ▶Bacteria "hotspots" will continue to be identified and fixed.
- ▶Stormwater education projects will be undertaken by the Clean Charles Coalition, an organization of private institutions along the Charles.
- ▶Municipalities will implement state-of-the-art municipal stormwater management plans.
- ▶Work with MDC on a masterplan for swimming lagoon at Magazine Beach.
- ▶Outreach to high schools in the watershed.
- ▶DNA-based study started to determine sources of bacteria in stormwater.
- ▶Issue permit for Mirant Power.

Who are the Partners?

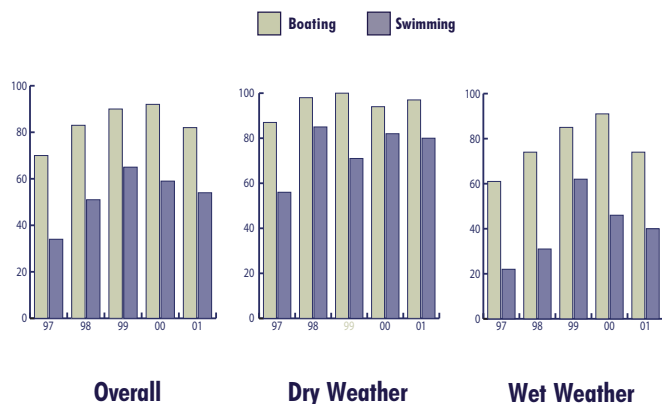
EPA New England • MA Department of Environmental Protection • MA Executive Office of Environmental Affairs • MWRA • Boston Water and Sewer Commission • Town of Brookline • City of Cambridge • Town of Dedham • Town of Needham • City of Newton • City of Waltham • Town of Watertown • Town of Wellesley • Town of Weston • Metropolitan Area Planning Council • Boston Harbor Association • Charles River Watershed Association • Conservation Law Foundation • Friends of the Muddy River • Restore Olmstead's Waterway • Save the Harbor/Save the Bay • Watertown Citizens for Environmental Safety • Boston University • Brandeis University • GZA • Genzyme • Harvard University • Ionics • Massachusetts General Hospital • MIT • Netcasters, Inc. • Northeastern University • Polaroid • Stop & Shop • Triumvirate Environmental • USGS • New England Interstate Water Pollution Control Commission • Urban Ecology Institute • Pfizer

Want More Information?

- ▶www.epa.gov/region01/charles/
- ▶www.crwa.org
- ▶www.usgs.gov/charles_river
- ▶www.cleancharles.org

Overview of Progress

Charles River Bacteria Data
Percentage Water Quality Standards Attained



Customer Call Center • 888-372-7341 • www.epa.gov/region1

Note: EPA-New England offers businesses and municipalities information and assistance to improve compliance with environmental laws and be better stewards of their local environment. Please call to learn how EPA can help.